Design Printed Circuit Board

H081

Assignment 1

ATmega8 Dev Board with TransFlash microSD

Due Date: 7th June 2010

Name: ___________________________
The Task

You have been working on a Schematic and Layout for an Atmel atmega8 board over the last few weeks. Now that your design has reached a finished stage, the design specification has been changed. You need to

- add a Micro SD Transflash socket to your layout.
- change the reset switch to match the supplied data sheet.

To Hand UP

- Printed copy of the original schematic w/o microSD.
- Printed copy of the original PCB w/o microSD.
- BOM for the original design (Bill Of Materials, use help to look up how to do this / hint it is a type of report).
- Printed copy of the modified schematic
- Printed copy of the modified PCB
- BOM for the modified design
SPECIFICATIONS

1. RATING : DC 12V, 50mA Max
2. CIRCUIT : 1C – 1P
3. OPERATING FORCE : 160±30gf, 250±50gf
4. CONTACT RESISTANCE: 100mΩ Max
5. TRAVEL : 0.25±0.1mm
6. LIFE : 100,000 Cycles Min
7. TOLERANCE : ±0.2
SPECIFICATION:
Current Rating: 0.5A.
Voltage Rating: 250V AC/DC
Dielectric Withstanding Voltage: AC 500V r.m.s.
Insulation Resistance: 1000 Megohm Min
At DC 500V.
Contact Resistance: 100 Milliohms Max
Operating Temperature: -20°C~60°C
Contact Retention Force: 3.0N Min./Per Contact
Mating Force: 9.8N Max
Unmating Force: 1.47N Min And 9.80N Max
Housing: Hi-Temp Plastic UL 94V-0 Rated.
Contact: Copper Alloy (C5191H t=0.15mm).
Grounding: Copper Alloy (C2680H t=0.15mm).
Shell: Stainless Steel (SUS304 t=0.15mm).
RoHS Compliant.

Pattern Prohibition Area

Recommended PCB Layout
(All Tolerance Are ±0.05)

Connector Outline

Gnd

15882

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